

Outline demolition and construction management plan

43-47 Piccadilly
11th February 2021

1 Introduction

This Outline Demolition and Construction Management Plan has been prepared to support an application for 43-47 Piccadilly. This development is for the construction of a new 129 bed hotel and associated restaurant in a building of 12 storeys above a retail unit to the ground floor and basement, including the partial demolition of existing warehouse, the façade retention of the existing warehouse facing Back Piccadilly, and the refurbishment of a listed townhouse at 47 Piccadilly.

This document has been prepared in the absence of any contribution by a potential contractor. It is anticipated that details of the demolition and construction management plan will be subject to a condition should planning permission be granted.

However, this document identifies the key chapters of the document that will be prepared by the contractor once appointed for the works on site.

This document describes the key activities for the demolition of the existing properties on the development site, along with the subsequent construction works.

Construction planning for demolition and construction is necessarily broad at this stage and may be subject to modification during the appointment of a Main Contractor and detailed construction planning. Consequently, a number of aspects of construction in relation to environmental issues cannot, at this stage, be accurately predicted. For example, the exact number of vehicles required during site works will be dependent on the activity being undertaken at any moment in time.

The Development will be procured as a Design & Build Contract with the likely appointment of a single Main Contractor for the entire demolition and construction works. The appointed Main Contractor will supervise and oversee all Works.

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2 Site location

The application site is 43-47 Piccadilly, which is located in the 'Piccadilly Gateway' area of Manchester City Centre to the east of Piccadilly Gardens and to the south of the 'Northern Quarter'.

The application site bounds Piccadilly to the south (its frontage), Lever Street to the west, Back Piccadilly to the north, and a Grade 11 listed five-storey building to its east (to which the buildings on the site are adjoined).

The site is sub-divided into three separate plots, Plot 1 is the vacant land at 43-45 Piccadilly, Plot 2 is the former warehouse, and Plot 3 is the former townhouse at 47 Piccadilly.

3 Site establishment

Site Hoarding

The site will be made secure with a 2.5metres high solid painted timber hoarding system which will be situated around the whole of the boundary of the development site. Water barriers will be installed in front of any hoarding that may front onto any public highway.

Office & Welfare Facility

The site welfare facility will be situated to the rear of the buildings.

The site welfare facility will consist of a site workforce breakfast & lunch cabin, both male and female toilet provision with hot and cold running water, and a dry room and locker room. No food will be cooked on the site, but a minimum of two refrigerators and two microwaves and four kettles will be provided for storing and heating of food and drinks.

The site welfare facility will also include a site office for the site management, and will consist of a meeting room, and the office accommodation will also include a hot and cold drinks provision, and male and female toilet provision (with hot and cold running water).

The site office & welfare facility will be serviced from mains electricity and water. Temporary generators will be avoided (where possible).

The site office and welfare facility will be locked (and the internal lighting switched off) at the end of the working day and opened at beginning of the working day.

Site Storage

Site storage will generally be situated on the part of the site utilizing the footprint of the building and rear. All valuable site tools and materials will be locked in storage containers.

4 Delivery vehicles ingress and access

Personnel Ingress & Egress

There will be a personnel gate located on Back Piccadilly, which will either be controlled by finger-print recognition or a gateman. This gate will be secured overnight. Personnel routes to and from the site will be via the existing public footpath on Back Piccadilly.

Vehicle Ingress & Egress

It is proposed that there will be a vehicle gate for ingress and egress into the site off Lever Street and onto Back Piccadilly. The delivery gate will be manned by a gateman. It is possible that all loading and unloading of plant and material will take place on Lever Street.

5 Car parking for site workforce

No car parking will be provided on the construction site for any site staff or visitors. Site operatives will be required to park their vehicles at one of the several public car parks which are situated around outskirts of Manchester. In addition, site operatives will be encouraged to use the local public transport provision (such as Piccadilly Train Station, Bus Stops, and Piccadilly Tram stops).

6 Hours of site working

Site operations will be carried out in accordance with the following Manchester City Council's site working guidelines.

- Monday - Friday: 7.30am - 6pm
- Saturday: 8.30am - 2pm
- Sunday / Bank holidays: No work

The workforce may arrive on site 30 minutes prior to work commencing, but no working outside these times, unless changed by prior agreement with Manchester City Council. Noise will be kept to a minimum in the first hour. Site operations on a Saturday will be avoided where possible.

7 Demolition of existing buildings

The site works will require the demolition of the existing former warehouse to Back Piccadilly, however the rear façade of the warehouse will be retained. The former townhouse at 47 Piccadilly will be retained.

The demolition of the former warehouse will be carried out by a qualified demolition contractor, which will include a licensed asbestos removal contractor. It is currently planned that the demolition contractor and asbestos removal contractor will form part of the main contract with the appointed Design & Build Main Contractor.

No asbestos removal or demolition works will commence until the site has been fully secured and hoarded off from the public.

Asbestos Removal

The appointed Demolition Subcontractor will record, control, remove and dispose of all asbestos in accordance with current legislation and best practice and this will include the following:

- preparation and approval of specific detailed asbestos removal method statements

- Notification of asbestos removal to the Health and Safety Executive (HSE)
- No works can commence without the ASB5 notice being approved by the HSE
- Areas not accessible during the demolition and refurbishment survey will be inspected and surveyed prior to works commencing
- Additional asbestos finds will result in re-notification of ASB5 approval to the HSE
- Asbestos removal will be carried out under license by approved contractors, who are a member of the Asbestos Removal Contractors Association.

All materials that are contaminated or contain asbestos will have full documentation from the licensed tip where they are to be disposed, so as to provide a full audit trail.

The sequencing for both the asbestos removal and soft strip will be carried out working down from roof level through the existing floor plates to the ground and basement levels.

Demolition works

The Demolition Subcontractor will carry out the demolition of the former warehouse with the exception of the Back Piccadilly facade. The method of demolition will commence at the top of the building and working down to the ground. The preferred method of demolition plant is a Hi-reach excavator. All works will be undertaken in a controlled manner.

The following methodology is likely to be implemented by the appointed Main Contractor to whom the Demolition Subcontractor will be required to undertake to minimise the impact of the works:

- The immediate area around the demolition area will be cordoned off and warning signs erected. A controlled drop zone within the demolition area will be established and further demarcation established.
- Progressive floor-by-floor removal by a Hi-reach excavator will start at the roof level and work down the buildings. Only one demolition Hi-reach excavator will be used at one time.
- Hydraulic breakers will be avoided where possible, but may be required to break out any concrete situated in the ground which clashes with the proposed building.
- Specialist cutting can be utilised to reduce noise and vibration especially in areas where existing foundations are to be removed.

Dust suppression will be controlled at the working face and cart away area by a fine water spray. The quantity of water emitted by the sprays will be regulated and controlled to prevent any flooding at ground floor level.

All concrete and brick material will be re-used as temporary site material such as the piling mat or the haul roads. All other demolition material will be segregated and disposed of off-site at a registered waste disposal site or reclamation yard.

8 Construction of the proposed building

Substructure

Following the completion of the demolition works the site will be graded to enable the construction of a piling mat. The basement construction will typically be a CFA piling system to form a contiguous retaining wall around the perimeter of the basement. A reinforced concrete capping beam will be provided at the head of the piled basement wall to allow the concrete floor slab to be tied into it. CFA piling will also be used for the construction of the foundations within the center of the building. CFA piling will provide a less disruptive solution than driven piles.

On the completion of the basement wall, the basement excavation will be carried out and the majority of the ground material within the basement will be removed from the site, but where possible material will be retained to make up any levels. The completion of the internal pile caps will follow, along with the construction of the basement floor slab and associated drainage.

Groundwater inflow will be considered when determining the details of basement construction and appropriate retaining walls.

Sub-structure and building envelope

The superstructure works (structural frame and floor slabs) will be erected as a concrete frame construction up to second floor with a reinforced concrete circulation core to all levels. Works above second floor will be constructed using a load-bearing metal structural frame.

The main building envelope will be a combination of hand laid bricks and GRC panels to upper levels. The roof is likely to be a Hot Melt Roofing System

The following methodology are anticipated:

- The concrete circulation core will be constructed in its entirety from basement level to the roof level.
- A tower crane will potentially be situated in one of the central lift shafts or on the outside elevation of the building for the duration of the superstructure and envelope works. A mobile crane may also be used to construct some parts of the steel frame. The final works to the steel frame will be the temporary edge protection.
- The erection of the steel frame will typically follow after the installation of the tower crane.
- The ribbed deck/trapezoidal profiled deck with reinforced concrete will commence from the ground floor of the building and continue up to the second floor.
- The building envelope units and glazing units will be lifted into position using the tower crane. Operatives will fix the brickwork and GRC panels from Mass Climbers (and potentially scissor lifts at the lower section of the building).
- The roofing material will be lifted onto the roof via the tower crane, and operatives will complete the roof construction from at roof level.
- On completion of the roof and building envelope, the roof top plant will be lifted into place and the tower crane will be dismantled.

Internal works to the former townhouse at 47 Piccadilly will be protected from water ingress by a temporary weatherproof protection to the roof. Details to be agreed with a specialist sub-contractor.

Building services and internal finishes

The internal passenger lifts will be temporarily utilised for the transporting of the building services to enable the first and second fix building services to be completed at each floor.

The internal finishes will also be transported to each floor via the internal passenger lifts.

The final element of the works will be the completion of the public realm works and the highway alteration works. Some of these works will have to be undertaken outside the site hoarding line. In these situations, a herras fenced area will be required to safeguard the public from the work areas. Traffic management will also be required for works in the public highway.

Testing and commissioning of the building services and snagging of works will be ongoing up until the practical completion of the project.

The site establishment will be de-mobilised following the practical completion of the building and the external works.

9 Pollution

Highways Pollution

It is anticipated that there will be a risk of site muck/debris being tracked onto the public highway when delivery vehicles leave the site during the demolition and ground work stages. Subsequently, the delivery egress gate will be equipped with a rubble road or a jet washing facility manned by the gateman for the cleaning off of any site debris before any delivery or haulage vehicle is permitted to enter the public highway. This wheel cleaning provision will be continued on in the later construction stage of the project if there is still a risk of site muck/debris still being dragged onto the public highway. A road sweeper will regularly attend to keeping the public highway clear at the later stages of the project.

Light Pollution

All lighting relating to the construction works and site accommodation will be installed in locations/positions to avoid any light spillage/glare onto the public highway or into neighbouring properties. Any lighting to the site work areas will be switched off for the non-working hours, and the only lighting potentially left on overnight will be to fire evacuation routes and circulation routes.

The site hoarding line will include low level lighting with a low lux in any locations where the hoarding line fronts the public highway. This lighting will only be illuminated in the dark autumn nights and overnight.

Air Pollution

The appointed Main Contractor will be required to minimise any air pollution relating to the construction works. The feedback from a number of Main Contractors which are likely to be on the tender list is that they are comfortable that the works will not result in an increase in AADT on any surrounding roads which exceeds more than 25No. heavy duty vehicles per day during in the construction works. The only period when high volumes are anticipated to be close to this level is during the bulk excavation works. If there is a risk that this threshold may be breached then the Main Contractor will be required to notify the Council. Water suppression will be used for any cutting or grinding activities that may be carried out on site. However, cutting and grinding will be kept to a minimum for various reasons.

Noise Pollution

All reasonable steps will be taken to minimise any noise disruption to adjacent businesses and residential properties. Where it is necessary to carry out noisy activities, these will be identified well in advance by the Main Contractor and the timing agreed prior to commencement.

Operatives working in noisy areas will be monitored to ensure they are wearing the necessary protective equipment and that they are not exceeding their permitted exposure periods. No radios or other audio equipment will be allowed on site. Where it is necessary to carry out noisy activities these will be carried out in accordance with Local Authority requirements, and neighbouring residents and businesses will be given advance notice of any anticipated periods of increased noise levels.

Site Waste

A Site Waste Management Plan (SWMP) specifically deals with the management of waste during the design and construction phases of the development, and is a live document that will be initiated at the tender stage of development on instruction by the Client. This document will be maintained and updated by the Main Contractor as the project progresses and will be finalised within one month of the project's practical completion. The preparation of a SWMP will be completed prior to works commencing on site. However, the following approach will be applied:

- All construction waste will be segregated in separate recycling skips, and will be stored in the locations indicated on the enclosed plan. A registered waste company will be employed to remove the recycle skips every 1-2 days to avoid the build-up of waste and thereby eliminating the risk of attracting vermin.
- Bulk waste arising from the demolition and strip out process will require specific disposal procedures, with material being transported to an appropriate licensed disposal facility by a licensed waste contractor. Litter will not be allowed to accumulate around the site perimeter.

Public Relations and Community Liaison

The appointed Main Contractor will be required to register the Site with the 'Considerate Constructors Scheme' which is administered by the Construction Industry Board. This is a voluntary code of practice that seeks to:

- Minimise any disturbance or negative impact (in terms of noise, dirt and inconvenience) sometimes caused by construction sites to the immediate neighbourhood.
- Eradicate offensive behaviour and language from sites.
- Recognise and reward the contractor's commitment to raise standards of site management, safety and environmental awareness beyond statutory duties.
- During the works there will be regular communication with neighbouring businesses and residents.

To ensure local businesses and residents are informed and aware of the ongoing works the Main Contractor will be required to:

- Employ a Community Liaison Officer.
- Give presentations to neighbours and arrange regular Community Liaison Group meetings.
- Open forums to encourage general public participation (if required).
- Issue regular site newsletters to all neighbouring properties.
- Ensure regular visits by the Site Manager to neighbouring premises are made to update them on forthcoming works and ascertain whether they are experiencing any problems.

- Display project bulletins on the site hoardings in prominent locations; and include the Contractors point of contact for the neighbouring residents, along with a contact telephone number.

10 Health & Safety plan

Construction Health & Safety Plan

A Construction Health and Safety plan will be developed in detail for the site works prior to any works progressing. Separate Risk Assessments and Method Statements will be required for individual operations carried out as part of the works. All trade contractors are to submit their own health and safety plans, carry out risk assessments / method statements for their works and everyone on site are required to be CSCS qualified.

The construction works will be legally obligated to comply with the CDM regulations 2015.

Emergency Evacuation Procedure

Contact names and phone numbers will be made available in case of out of hours emergencies relating to the site. This information will be displayed prominently on the hoarding.

A fire evacuation plan will be drawn up and prominently displayed on site by the appointed Main Contractor. The site offices will have their own plans drawn up. Site evacuation routes will be clearly marked on site, as will fire extinguisher points and practice drills will be carried out.

End of report